

REMARKS

Upon entry of the foregoing amendments, claims 1-28 are pending in the application, with claims 1, 22, 25, 26, and 27 being the independent claims. New claims 27 and 28 have been added. Support can be found, for example, at page 6, paragraph 49 of the specification.

Based on the above Amendment and the following Remarks, Applicant respectfully requests that the Examiner reconsider all outstanding rejections and that they be withdrawn.

In an exemplary embodiment of the present invention, referring to Figure 1 of the present application, for example, a video surveillance system may be adapted for monitoring a location. The video surveillance system may be capable of analyzing video data from live sources or from recorded media. The system may have a prescribed response to the analysis, such as record data, activate an alarm mechanism, or activate another sensor system. See, e.g., Specification, paragraph 65.

The Office Action rejects claims 1-4, 19-23, and 25-26 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,411,724 to Vaithilingham et al. (the '724 patent). Applicants respectfully traverse this rejection because the '724 patent does not teach the recited features of claims 1-4, 19-23, and 25-26.

Independent claim 1 recites "A computer-readable medium comprising software for a video surveillance system, comprising code segments for operating the video surveillance system based on video primitives." The '724 patent fails to teach the recited

features of claim 1 for at least two reasons. First, the '724 patent does not teach the recited "code segments for operating the video surveillance system." Referring to Figures 2 and 4 of the present application, for example, to operate a video surveillance system, the system may detect and archive video primitives of objects in a scene, and may detect event occurrences in real time using event discriminators. In addition, for example, action may be taken in real time, as appropriate, such as activating alarms, generating reports, and generating outputs. See, e.g., Specification, paragraph 104.

The Office Action aligns the recited "code segments for operating the video surveillance system" with an algorithm for multimedia information retrieval and relies on several portions of the '724 patent, all of which fail to teach or suggest this feature. Specifically, in making this rejection, the Office Action relies on Figures 2 and 4 of the '724 patent. Neither Figure 2 nor Figure 4 teaches or suggests anything about code segments for operating a video surveillance system. Instead, Figure 2 of the '724 patent illustrates a process for generating meta-descriptors for repository multimedia information and for performing a query of the repository. See, the '724 patent, col. 4, lines 30-32. Similarly, Figure 4 of the '724 patent illustrates a technique for optimizing meta-descriptors that involves formalizing user input by a human expert. See, the '724 patent, col. 9, lines 29-31. Neither generating meta-descriptors, performing a query of a multimedia information repository, nor optimizing meta-descriptors involves operating a video surveillance system.

The Office Action further relies on three passages in the '724 patent that fail to teach or suggest code segments for operating the video surveillance system. The first relied upon passage at column 1, lines 24-27 of the '724 patent discusses locating multimedia information when searching through various inhomogeneous forms of data. See, the '724

patent, column 1, lines 3-36. Of the numerous inhomogeneous forms of data noted in column 1, lines 9-30 of the '724 patent, data from video surveillance is included in the list. The '724 patent teaches searching through video surveillance data, not operating a video surveillance system. The method of searching and locating multimedia information in the '724 patent in no way teaches or suggests operating a video surveillance system, as is recited in claim 1.

The second passage cited by the Office Action discusses a data structure for representing information about a plurality of descriptors that are features of an item of multimedia information. See, the '724 patent, col. 2, line 65 to col. 3, line 4. A data structure for representing multimedia information is a scheme for organizing related pieces of information, and such a scheme neither teaches nor suggests code segments for operating a video surveillance system.

The third and final passage cited by the Office Action discusses searching, querying, and retrieving multimedia information. See, the '724 patent, col. 3, line 44 to col. 4, line 21. The acts of searching, querying, and retrieving do not teach or suggest operating a video surveillance system and, therefore, do not teach or suggest code segments for operating the video surveillance system.

Second, the '724 patent also fails to teach or suggest operating a video surveillance system based on "video primitives." In an exemplary embodiment of the invention, a video primitive refers to an observable attribute of an object viewed in a video feed. Examples of video primitives may include a classification, a size, a shape, a color, a texture, a position, a velocity, a speed, an internal motion, a motion, a salient motion, a scene change, a feature of a scene change, and a pre-defined model. See, Specification, paragraph 80.

The Office Action aligns the recited video primitives with meta-descriptors, as described in the '724 patent. Specifically, the Office Action aligns the recited video primitives with a data structure for representing information about a plurality of descriptors that are representations of features on an item of multimedia information belonging to a particular category of multimedia content, comprising a plurality of data elements indicating relevancy of the descriptors in describing the item of multimedia information. See, the '724 patent, col. 2, line 65 to col. 3, line 4.

Meta descriptors, as described in the '724 patent, are related to the general concept of meta-data. See, the '724 patent, col. 3, lines 51-54. In other words, a meta-descriptor for an item of multimedia information identifies parts of a descriptor (i.e., a representation of a feature) for that item of multimedia information that contains the most useful information for identifying that item of multimedia information. See, the '724 patent, col. 3, lines 58-62.

The recited video primitives are not descriptors about video products, as is defined by the '724 patent. Instead, the recited video primitives describe observable attributes viewed in a video feed. Further, the recited video primitives are not used to retrieve video product from a database, as is taught by the '724 patent.

Accordingly, because the '724 patent does not teach or suggest the recited features of claim 1, claim 1 is not anticipated by the '724 patent. Applicants therefore submit that claim 1 is allowable over the '724 patent. Claims 2-4 and 19-20 depend variously from claim 1, and are allowable as being dependent from an allowable claim.

Independent claim 22 recites similar features as claim 1 and is allowable for at least similar reasons as discussed above with respect to claim 1. Specifically, claim 22 recites "code segments for accessing archived video primitives" and "code segments for extracting

event occurrences from accessed archived video primitives." As discussed above, the '724 patent does not teach or suggest the recited video primitives. Further the '724 patent fails to teach or suggest accessing archived video primitives. Moreover, the '724 patent fails to teach or suggest extracting event occurrences from accessed archived video primitives. Applicants therefore respectfully submit that claim 22 is allowable over the '724 patent.

Claim 23 depends from claim 22, and is allowable as being dependent from an allowable claim.

Independent claim 25 recites similar features as claim 1 and is allowable for at least similar reasons as discussed above with respect to claim 1. Specifically, claim 25 recites "operating a video surveillance system based on video primitives." As discussed above, the '724 patent does not teach or suggest operating a video surveillance system or the recited video primitives. Applicants therefore respectfully submit that claim 25 is allowable over the '724 patent.

Independent claim 26 recites similar features as claim 22 and is allowable for at least similar reasons as discussed above with respect to claim 22. Specifically, claim 26 recites "accessing archived video primitives" and "extracting event occurrences from accessed video primitives." As discussed above, the '724 patent does not teach or suggest the recited video primitives, accessing archived video primitives, or extracting event occurrences from accessed archived video primitives. Applicants therefore respectfully submit that claim 26 is allowable over the '724 patent.

For at least the reasons discussed above, Applicants respectfully request that this rejection be withdrawn.

The Office Action on pages 4-8, in section 4, rejects claims 5-18 and 24 under 35 U.S.C. § 103(a) as being unpatentable over the '724 patent in further view of "A System for Video Surveillance and Monitoring," by Collins et al.

Claims 5-18 depend variously from claim 1. As discussed above, the '724 patent does not teach or suggest the recited features of claim 1. Collins does not cure this deficiency. Instead, Collins discloses a specific video surveillance system that does not employ video primitives. Accordingly, claims 5-18 are allowable over the combination of the '724 patent and Collins.

Claim 24 depends from claim 22. As discussed above, the '724 patent does not teach or suggest the recited features of claim 22. Collins does not cure this deficiency. Instead, Collins discloses a specific video surveillance system that does not employ video primitives. Accordingly, claim 24 is allowable over the combination of the '724 patent and Collins.

Further, the teachings of the '724 patent and Collins are from non-analogous art. In particular, the '724 patent teaches a method, technique, and/or algorithm for optimizing meta-data tagging of multimedia data. In contrast, Collins teaches a conventional video surveillance system. In comparing optimizing meta-data tagging of multimedia data of the '724 patent and the video surveillance system of Collins, the meta-data tagging of multimedia data art is quite different from video surveillance art, and one of ordinary skill in the art would not look to the meta-data tagging art for a solution to a shortcoming in the video surveillance art. Hence, one of ordinary skill in the art would not consider meta-data tagging as a way to operate a video surveillance system. Thus, the teachings of the '724 patent and Collins are from non-analogous art.

Applicants: Alan J. LIPTON et al.
Application No. 09/987,707

For at least the reasons discussed above, Applicants respectfully request that this rejection be withdrawn.

CONCLUSION

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is hereby invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,

Date: January 7, 2005



Michael A. Sartori, Ph.D.

Registration No.: 41,289

Daniel G. Vivarelli, Jr.

Registration No.: 51,137

VENABLE

P.O. Box 34385

Washington, D.C. 20043-9998

Telephone: (202) 344-4000

Telefax : (202) 344-8300